

CLAIMS

1. A method in switching a data flow of information packets between a sending and receiving entity, the method comprising:
 - buffering the packets from a plurality of paths in a queue;
 - noting portions in the queue attributable to each separate path within the plurality of paths;
 - sending a halt message to a sending entity corresponding to a halted path occupying a predetermined percentage of the queue;
 - determining if there is a free state corresponding to the queue,
 - if yes, then:
 - storing an indicator of the halted path in a free switch state including storing an indicator of the bandwidth associated with the halted path;
 - if no, then:
 - establishing a chronological order of the states;
 - determining an older portion of the states; and
 - purging the state for a path having the smallest bandwidth in said older part of the states, and
 - successively updating the indicator of the bandwidth when the queue reaches a congestion condition.
2. The method of claim 1 further comprising reusing the purged state.
3. The method of claim 1 further comprising determining the queue congestion by a threshold.
4. The method of claim 1 wherein the noting of the individual portions that different of the paths occupy is performed as a byte count.

5. The method of claim 1 wherein the state includes a counter field and that the path bandwidth is noted in said counter field as the number of times the respective path has been found to occupy the individually greatest portion of the queue.

6. A device for switching a data flow of information packets intended for paths between a respective sending and receiving entity, the device comprising:

a queue device for buffering the packets from the paths;

a device for halting a sending entity on congestion of the queue wherein the device for halting has means for halting the sending entity for the path occupying the individually greatest portion of the queue;

switch states for storing the halt condition wherein the switch states have a means for storing a bandwidth indicator for the halted path;

a means for noting the individual portions that different of the paths occupy in the queue;

a means for succesively updating the respective bandwidth indicator of halted paths as the queue is repeatedly congested;

a means for establishing a chronological order of the states;

a means for determining an older part of the states; and

a means for purging the state for a path having the smallest bandwidth in said older part of the states.

7. The device of claim 6 wherein the purged state is adapted to be reused.

8. The device of claim 6 further comprising a threshold detector for determining the congestion of the queue.

9. The device of claim 6 wherein the means for noting of the individual portions that different of the paths occupy is arranged to count the number of bytes.

10. The device of claims 6 wherein the state includes a counter field and that the arrangement has means for noting the path bandwidth in said counter field as the number

of times the respective path has been found to occupy the individually greatest portion of the queue.